

REMARKS

Applicant respectfully requests that the above-identified application be reexamined.

Claims 1-4, 6-9, and 11-14 are pending in this application. A final Office Action mailed October 15, 2007 (hereinafter "Office Action"), objected to Claims 2-4, 6-9, and 11-14 because of informalities. Claims 2, 3, 7, 8, 12, and 13 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 4, 6, 9, 11, and 14 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,898,419, issued to Liu (hereinafter "Liu"). Claims 2, 3, 7, 8, 12, and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the teachings of Liu. Claims 1-4, 6-9, and 11-14 have been amended to more clearly recite the claimed subject matter and obviate the claim informalities.

Applicant would like to express his appreciation for the courtesy shown during a telephone interview on December 27, 2007, with applicant's attorney. In accordance with that discussion, applicant has addressed the two issues raised by the Examiner. As discussed, applicant has changed the introduction of the independent claims (Claims 1, 4, 6, 9, 11, and 14) to recite that the redirected application is "a computing device" and that the redirected window is represented on display "of the same computing device." Applicant has also changed the wording from "received in association with" to "directed toward" the texture map image.

Pursuant to 37 C.F.R. § 1.111 and for the reasons set forth below, applicant respectfully requests reconsideration and allowance of the pending claims. Prior to discussing in detail why applicant believes that all the claims in this application are allowable, a brief description of the disclosed subject matter and brief descriptions of the teachings of the cited and applied references are provided. The following discussions of the disclosed subject matter and the cited and applied references are not provided to define the scope or interpretation of any of the claims of this application. Instead, these discussions are provided solely to assist the United States

Patent and Trademark Office in recognizing the differences between the pending claims and the cited references, and should not be construed as limiting on the disclosed subject matter.

#### Disclosed Subject Matter

A method, computer-readable medium, and system for redirecting an input message to a redirected application are disclosed. The redirected application has at least one of its windows redirected, the redirected window represented on a display device as texture map image. The method, computer-readable medium, and system determine if the input message is directed to a redirected application having at least one of its windows redirected ("redirected application"). If directed at the redirected application, the input message is intercepted. Intercepted input messages are transformed to correspond to the display location of the texture image map that represents the application window that has been redirected, if transformation is necessary. The input message (transformed if necessary) is redirected to the redirected application.

One application of the invention is redirection of user interactions with a graphical image that appears on a user's display, rather than an actual window object. More specifically, instead of an actual window object being displayed to a user, a texture map image appears and interacts with the user as though it were the actual window object of an application that has been redirected while the actual window object is hidden from a user. Redirection is required because operating systems do not normally recognize a texture map image, i.e., a textured polygon, as a window object. The present invention allows an operating system to recognize a texture map image by creating a two-dimensional bitmap in memory that maps the texture map image to an actual window object. The two-dimensional bitmap represents the actual location of the redirected window that is represented as a texture map image. However, the actual window object is not displayed to the user but is merely represented in memory as if it does appear at the actual location. Input events, like mouse clicks, that are directed toward a texture map image may not correspond with the actual location of the redirected window. As a result, in accordance

with the invention, input messages received from input devices are transformed, if necessary, and redirected to the actual location of the redirected window of the redirected application.

One implementation of the invention involves installing at least one hook to intercept input messages. Input messages intercepted by the hook are tested to determine if the input messages are directed to a redirected window of a redirected application. Messages are transformed to correspond to the display location of the texture map image that represents the redirected application window. Updated input messages are sent to the redirected application.

#### Summary of U.S. Patent No. 5,898,419 - Liu

Liu is directed to a method and apparatus for scaling a cursor on a local computer to have the same size relative to a window on a local computer as another cursor has to another window on a remote computer. More specifically, Liu describes a first computer workstation 810 linked to a second computer workstation 820. The window 812, which is displayed in the first computer workstation, is copied to window 822 at the second computer workstation. A hook procedure is used to intercept movement of the cursor 814 at the first workstation. These movements are transmitted together with representations of the cursor image over the link from the first computer workstation to the second computer workstation. The cursor image is then displayed 824 at the second computer workstation in a position corresponding to the position at the first computer workstation. The size of the cursor image is scaled. The cursor has the same size relative to the windows of the second computer workstation as it had relative to the window of the first computer workstation. Liu teaches scaling from a two-dimensional object on one screen to a two-dimensional object on another screen. As discussed more fully below, Liu does not teach or suggest the subject matter of the claims remaining in this application, particularly when the subject matter of the claims is considered as a whole.

#### Objection to Claims 2-4, 6-9, and 11-14

As indicated above, Claims 2-4, 6-9, and 11-14 were objected to because of informalities. As noted above, Claims 2-4, 6-9, and 11-14 have been amended to more clearly recite the

claimed subject matter and overcome claim objections. Accordingly, applicant respectfully requests that the claim objections be withdrawn.

Rejection of Claims 2, 3, 7, 8, 12, and 13 Under 35 U.S.C. § 112, Second Paragraph

As indicated above, Claims 2, 3, 7, 8, 12, and 13 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As noted above, Claims 2, 3, 7, 8, 12, and 13 have been amended to more clearly recite the claimed subject matter. More specifically, since each of these dependent claims expands on the language of the claims from which they depend, the prior letter identifiers have been changed to (i), (ii), (iii), or (iv) as appropriate. Accordingly, applicant respectfully requests that the rejection of these claims under 35 U.S.C. § 112, second paragraph, be withdrawn.

Rejection of Claims 1, 4, 6, 9, 11, and 14 Under 35 U.S.C. § 102(b)

As indicated above, Claims 1, 4, 6, 9, 11, and 14 were rejected under 35 U.S.C. § 102(b) as being anticipated by Liu. Amended independent Claims 1, 4, 6, 9, 11, and 14 substantially recite similar features in relevant portions. As such, Claim 1 will be used as a representative claim for the purpose of discussions below.

Amended independent Claim 1 recites, *inter alia*:

- ... (a) determining if an **input message directed toward the texture map image** is directed at a redirected application having at least one of its windows redirected ("redirected application"); . . .  
(c) if required, **transforming the input message to correspond to the display location of the application window, represented by the texture map image**, that has been redirected if the input message is directed at the redirected application; . . . (Emphasis added.)

Liu does not disclose, teach, or even remotely suggest determining if an input message directed toward the texture map image is directed at a redirected application. Liu is directed at a method for scaling a cursor on a local computer to have the same proportional size as another cursor on the display of a remote computer. (Abstract.) Liu discloses that a mouse action indicating a movement is checked in step 430 to determine whether or not the new mouse

position is located within the captured window. (Col. 6, lines 50-54.) Determining the mouse position within the borders of a window is not the same as determining whether an input message *directed toward the texture map image* is directed at a redirected application, a window of which is represented by the texture map image, as recited in amended independent Claim 1. The determination of mouse position as disclosed by Liu is performed with respect to a functional window, in contrast to the determination that an input message received in association with the texture map image is directed at a redirected application. Liu discloses, in Figure 7, that the processing at terminal B corresponds to the processing at terminal A, clearly indicating that *both windows 812 and 822 are functional windows* performing certain information processing. (Col. 9, lines 20-21.) Those skilled in the art will appreciate that a texture map image is *not a functional window*. Liu discloses, in Figure 8, that a *window 812* on a screen 810 at terminal A is *copied* into *window 822* on screen 820 at terminal B. (Col. 10, lines 48-54.) Liu further discloses that window 822 provides a scaled representation of window 812; nevertheless, both windows 812 and 822 are functional windows. As noted above, neither of the windows 812 and 822 are the same as a texture map image representing a redirected window.

Liu does not disclose, teach, or even remotely suggest *transforming* the input message to correspond to the display location of the application window, represented by the texture map image, as recited in amended Claim 1. Liu discloses that information on the cursor is formatted into a message in step 660, containing a new cursor position and other cursor information. The message is then passed through the communications software 220 for transmission to terminal B in step 670. (Col. 8, line 65 - Col. 9, line 2.) The cursor position disclosed by Liu and included in the message is a fixed position as it is transmitted to the window 822 at terminal B. A fixed cursor position is not the same as transforming the input message to *correspond to the display location* of the application window, represented by the texture map image, as recited in amended Claim 1. The fixed cursor position, disclosed in Liu, is merely *transmitted* to window 822 at terminal B. *Transmission* is not the same as *transformation*. Transformation requires a change

in the message. Specifically, Liu does not disclose or even suggest that the input message is transformed to correspond to the display location of the application window represented by the texture map image. Unlike Liu, after transformation, the input message is, by definition, different from the input message initially received in association with the texture map image. Therefore, amended Claim 1 is submitted to be allowable for at least the reasons discussed above.

Amended independent Claims 4, 6, 9, 11, and 14 substantially recite similar features as discussed above with respect to amended Claim 1 and are submitted to be allowable for the same reasons discussed above with respect to Claim 1.

Rejection of Claims 2, 3, 7, 8, 12, and 13 Under 35 U.S.C. § 103(a)

As indicated above, Claims 2, 3, 7, 8, 12, and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu. Amended Claims 2, 3, 7, and 8 and amended Claims 12 and 13 depend from amended Claims 1, 6, and 11, respectively, and are submitted to be allowable for at least the same reasons discussed above with respect to Claims 1, 6, and 11.

CONCLUSION

In view of the foregoing amendments and remarks, applicant respectfully submits that all of the claims pending in the present application, Claims 1-4, 6-9, and 11-14 are allowable. Early and favorable action allowing these claims and passing this application to issue is respectfully solicited. If the Examiner has any questions, the Examiner is invited to contact applicant's attorney at the number set forth below.

Respectfully submitted,

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